

Department of Defense
Human Factors Engineering
Technical Advisory Group
Meeting 55



May 15-18 2006

Host:

Nellis Air Force Base

Aladdin Resort
Las Vegas, NV

Meeting Theme

Enabling Decision Superiority with HSI

Decision making is a human activity and, as such, the quality of human systems integration (HSI) for the development and design of technology that will be used to achieve decision superiority is crucial.

Technology cannot replace accurate decision making, good strategy and progressive thinking, but technology can provide the information that the individual needs to maximize the capability to make decisions. Decision superiority requires adapting to changes in a broad range of circumstances faster than circumstances can change or the adversary can adapt. Those responsible need to:

- Balance capabilities
- Manage risks
- Act simultaneously or sequentially

These attributes are needed to achieve the desired end-state with the least amount of risk and cost in lives and assets. Decision superiority will increase the ability to respond effectively and proactively thereby impairing the ability of circumstances to degrade or in a combat setting of an adversary to react effectively. Whether on the battlefield or at a control station, decision superiority in the civilian and military front is equally important. The focus of decision superiority is to anticipate all situational circumstances and capabilities that will be used for any occurrence be it conflict or crisis before it happens. Decision superiority requires a singular networked environment that will enable:

- Continuous and collaborative planning,
- Adaptive command and control
- Employment of tailored, capabilities-based force packages

Decision superiority allows the individual, warfighter or controller, to make better informed decisions as circumstances unfold. Vast amounts of information need to be integrated into the decision making process through data fusion-manipulating and combining data from numerous sources to form useful information. Decision makers need to know the players in their global decision space, anticipate challenges and uncertainties, understand consequences of all responsive and reactive actions, and be proactive to minimize negative outcomes.

Achieving decision superiority in a net-centric environment requires new ways of thinking about how people acquire, integrate, interpret, use, and share information. As the theme for the 55th Human Factors Engineering Technical Advisory Group, the focus will be on how HSI and its component specialty areas will impact the involved net-centricity and the need for decision superiority by facilitating this inherently human endeavor where the human is key.

PROGRAM SUMMARY

<p>Department of Defense Human Factors Engineering Technical Advisory Group Meeting 55: 15-18 May 2006 Las Vegas, NV</p>

Monday, 15 May

0830 - 1000	Executive Committee meeting
1000 - 1100	New member orientation
1100 - 1300	Luncheon Break
1300 - 1700	Plenary Session
1800 - 2000	Networking Mixer

Tuesday, 16 May

0730 - 0830	Technical Society/Industry
0830 - 1100	Personnel Selection and Classification - Part 1
0830 - 1100	Workload and Stress - Part 1
0830 - 1100	Human Factors Standardization
0930 - 1000	Networking, coffee
1100 - 1230	Luncheon Break
1230 - 1430	Personnel Selection and Classification - Part 2
1230 - 1430	Workload and Stress - Part 2
1230 - 1430	Design: Tools and Techniques - Part 1
1430 - 1500	Networking, coffee
1500 - 1700	Design: Tools and Techniques - Part 2
1500 - 1700	Human Modeling and Simulation
1500 - 1700	Human Factors Test and Evaluation
1700 - 1800	Service Caucuses and TS/I Meetings

Wednesday, 17 May

0830 - 1100	System Safety/Health Hazards/Survivability canceled
0830 - 1100	Controls and Displays
0830 - 1100	Human Factors in Training - Part 1
0930 - 1000	Networking, coffee
1100 - 1230	Luncheon Break
1230 - 1430	Human Factors Engineering/Human Systems Integration: Management and Applications
1230 - 1430	User-Computer Interaction
1230 - 1430	Human Factors in Training - Part 2
1430 - 1500	Networking, coffee
1500 - 1700	Human Factors in Extreme Environments
1500 - 1700	Sustained/Continuous Operations
1700 - 1800	Mission Performance Measurement Interest Group
1915 - 2100	Social

Thursday, 18 May

0830 - 1000	Operating Board
1000 - 1600	Tour

SESSIONS

MONDAY, 15 MAY *(meeting rooms are subject to change)*

Executive Committee – **0830 – 1000 - Grand Ballroom 8**

New Member Orientation – **1000 – 1100 - Grand Ballroom 8**

Plenary – **1300 – 1700 - Grand Ballroom 8**

1300 Welcome - DoD HFE Chair

1310 Welcome and Overview - Mr. James S. “Odie” Davis, Air Force Research Laboratory Liaison to USAF Warfare Center, Nellis Air Force Base

1330 *Title Pending* - Lt Col Brad Borman, Effects Based Operations, Joint Forces Command

1400 Operational Neuroscience and its Impact on Decision Superiority - Dr. Amy Kruse, Program Manager, DARPA-DSO -

1430 Break

1500 The Role of Collaboration in Decision Superiority - Ms Laura Militello, Sr. Research Psychologist, University of Dayton Research Institute

1530 Enabling Decision Superiority with HSI - Major Peter Garretson, Chief, Future Technologies Branch, HQ USAF Future Concepts and Transformation

1600 *Title Pending* - Mr. Rick Etheridge, Director Human Performance and Systems Acquisition Branch, Chief of Naval Operations OPNAV N173

1630 Wrap up

TAG Mixer – **1800 – 2000 - Diamond 2**

TUESDAY, 16 MAY

Technical Society/Industry – **0730 – 0830**

- Association for Aviation Psychology (AAP): an overview; Dr. Kirby Gilliland, TS/I Alt. Rep. AAP
- Research at C-SHOP; Dr. Kirby Gilliland, Director of Center for the Study of Human Operator Performance, University of Oklahoma
- "What do we do in HSI?" SkillsNET and SEAPRINT's quest (part 1); Dr. Jennifer Narkevicius

Personnel Selection and Classification - **0830 – 1430**

- Test of Basic Aviation Skills: Pre-Implementation Status - Dr. Tom Carretta, Air Force Research Laboratory
- NPRST Whole Assessment Approach to Selection and Classification - Dr. Amanda Lords, Navy Personnel Research, Studies, and Technology
- Development of an Army Aviator Selection Instrument - Dr. Lawrence Katz, Army Research Institute Rotary Wing Aviation Research Unit
- NAMIS Screening Technology Development - Dr. Lisa Mills, CNO-N141 Navy Selection, Classification & Surveys
- ASTB Redevelopment Efforts – Program Update - CAPT John Schmidt, Naval Operational Medicine Institute
- Psychomotor Testing in Naval Aviation Selection and Demo - LT Brent Olde, Naval Operational Medicine Institute
- Discussion and Wrap-Up

Workload and Stress - Part 1 - **0830 – 1100**

- Effects of Individual Factors and Workload Level on Performance in a Multi-task Environment - Branscome, T. A., & Grynovicki, J.O. (Army Research Laboratory, Human Research and Engineering Directorate)
- A Dynamic Workload Prediction: Applications of Commercial Off-The-Shelf Gaming Environments to Cognitive Exploration - Klein, E., and Wertz, J.(United States Military Academy, Department of Behavioral Sciences and Leadership)
- Crew Mental Models of Shared Workload for an Automated Military Ground Vehicle - Smyth, C. (Army Research Laboratory, Human Research and Engineering Directorate)
- Workload and Information Quality in Effects Based Operations: Lessons from MNE 4 - Bowman, E., PhD, Thomas, J., MS (Army Research Laboratory, Human Research and Engineering Directorate)
- Effects of Stress and Coping Style on Basic Combat Training Confidence, Performance, and Discipline - Davis, T. W., PhD (Army Research Laboratory, Human Research and Engineering Directorate)
- Individual Differences in Stress Resilience and Human Performance During - Taylor, M.K., Sausen, K.P., Mujica-Parodi, L.R., Potterat, E.G., Yanagi, M.A., & Kim, H. (Naval Health Research Center, State University of New York, Fleet Aviation Specialized Training Group)

Human Factors Standardization – **0830 – 1100**

- Introduction of Attendees
- Status Reports
 - MIL-STD-1472 (Human Engineering)
 - EIA HEB-1 (Human Engineering Principles and Practices)
 - MIL-STD-1474 (Noise Limits)
 - MIL-STD-1787 (Aircraft Display Symbolology)
 - Joint Service Specification Guide-2010
 - Crew Systems Integrity Program (CrewSIP)

- FAA Human Factors Design Standard
- NASA-STD-3000 (Human Systems Integration Standard)
- HFES & ISO TC 159 (Ergonomics)
- Data Item Descriptions
- Putting SubTAG products into DTIC
- New Chair Elect
- New Business

Workload and Stress - Part 2 – 1230– 1430

- Effect of Movement and Physical Exertion on Dismounted Soldier Vigilance - Mahoney, C.R., Hirsch, E., Hasselquist, L., Lesh, L.L., & Lieberman, H.R. (Natick Soldier Center, Science Applications International Corporation, U.S. Army Research Institute of Environmental Medicine)
- Salivary Cortisol as a Biological Marker for Enlisted Submariners - Osborne, L.A., LCDR, Cullum, M.E., PhD, O'Connor, K.H., PhD, & Coen, M.L., MS (Naval Institute for Dental and Biomedical Research)

Hands-On Workshop:

Cognitive Readiness in HSI – A demonstration of the Army's newest automated cognitive battery, Army Cognitive Readiness Assessment (ACRA). Ways to incorporate the cognitive data within model-based technology evaluations will be discussed. Fatkin, L., Swann, M., Thomas, J. (Army Research Laboratory, Human Research and Engineering Directorate)

Workshop is limited to 15 participants, unlimited observers. The registered participants will receive a CD containing the ACRA. Please click on link to see flyer with computer system requirements - <http://hfetag.dtic.mil/docs-meet/Workload and Stress flyer.pdf>

If you are interested in participating in this workshop please contact Debbie Patton (dpatton@arl.army.mil; DSN 298-5890, COMM 410-278-5890)

Design: Tools and Techniques - Part 1 – 1230 – 1430

- Introduction to the Session, Pam Savage-Knepshield, Ph.D., Research Psychologist, U.S. Army Research Laboratory, Human Research and Engineering Directorate, Fort Monmouth, NJ.
- Case Study for Designing a Simulated Training and Testing System, Carole Kortenhaus, U.S. Army Research Laboratory, Human Research and Engineering Directorate, Orlando, FL & Al Galbavy, Chenega Technology Services Corp, Orlando, FL
- Research to Support Design: Automated Feedback and Networked C3 Systems. John S. Barnett, Ph.D., Research Psychologist and Dr. Larry L. Meliza, Battle Command Feedback Team Leader, U.S. Army Research Institute for the Behavioral and Social Sciences, Orlando, FL.
- Collaborative Planning, Briefing, and After-Action-Review: An Agenda for Research and Practice. Lt. Brenda Blueggel and Lt. Dulcinea Yabut, Air Force Research Laboratory, Human Effectiveness Directorate, Mesa, AZ.
- Virtual Warriors: Synthetic Teammates for Command and Control Testing and Training. Bryan Brett, Science Applications International Corporation, Dayton, OH.
- Advanced UAV Testbed for Human Operator Research (AUTHOR). Edward A. Martin, Technical Director, Combat Automation Requirements Testbed (CART) Program, Air Force Research Laboratory, Human Effectiveness Directorate, Wright Patterson AFB, OH.

Design: Tools and Techniques - Part 2 – 1500 – 1700

- Introduction to the Session, Pam Savage-Knepshield, Ph.D., Research Psychologist, U.S. Army Research Laboratory, Human Research and Engineering Directorate, Fort Monmouth, NJ.

- HCI Design Patterns for C4SIR: A Vision for a DoD Design Reference Library. Terry Stanard, Ph.D., Research Psychologist; Jeff Wampler, Systems Engineer; Kendall Conrad, Research Fellow of the Consortium of Universities of the Washington Metropolitan Area, Air Force Research Laboratory, Human Effectiveness Directorate, Wright Patterson AFB, OH; and Glenn Osga, Business Area Manager, User-Centered Design Code 2461, Space & Naval Warfare Systems Center San Diego, CA.
- Work-Centered HCI Pattern Quality Metrics. Glenn Osga, Business Area Manager, User-Centered Design Code 2461, Space & Naval Warfare Systems Center, San Diego, CA.
- Exploiting Patterns in Work-Centered HCI Design: Leaping from One Sensor Domain to Another – With a Safety Net. Robert Dick, Ph.D., Principal Scientist and V. Alan Spiker, Ph.D., Principal Scientist, Anacapa Sciences, Inc., Santa Barbara, CA.
- HCI Design Patterns Discussion Forum: Next Steps. Terry Stanard, Ph.D., Research Psychologist, Air Force Research Laboratory, Human Effectiveness Directorate, Wright Patterson AFB, OH and Glenn Osga, Business Area Manager, User-Centered Design Code 2461, Space & Naval Warfare Systems Center San Diego, CA.

Human Modeling and Simulation – **1500 – 1700**

- Introduction to the Session, LT Jeff Grubb, NAVAIR Human Systems Department, NAS Patuxent River, MD
- Recent Trends in Digital Human Modeling and the Concurrent Issues that Face Human Modeling Approach. Sudhakar Rajulu, L. Javier Gonzalez, Sarah Margerum, Kurt Clowers, Richard Moreny, Andrew Abercromby and Luis Velasquez, Anthropometry & Biomechanics Facility, Habitability and Human Factors Office, NASA- Johnson Space Center, Houston, TX
- Validation of a Task Network Human Performance Model of Driving. Josephine Q. Wojciechowski, US Army Research Laboratory. Aberdeen Proving Ground, MD
- TITLE TBD. Rich Cornwall, Alion Science and Technology, Norfolk, VA
- Demonstration of Santos™: A New System for Human Modeling and Simulation. Timothy Marler, Steve Beck, and Karim Abdel-Malek, The US Army Virtual Soldier Research Program, The University of Iowa, Iowa City, IA
- Presentation of a Revised Charter, LT Jeff Grubb, NAVAIR Human Systems Department, NAS Patuxent River, MD

Human Factors Test and Evaluation – **1500 – 1700**

Technical Society/Industry - **1700 – 1830**

- National Training Systems Association (NTSA): an overview; Terry Fulbright, TS/I Rep. for NTSA
- "What you can do to help HSI" SkillsNET and SEAPRINT's appeal to TS/I (part 2); Dr. Jennifer Narkevicius (new TS/I chair)

Air Force Caucus - **1700 – 1830**

Army Caucus - **1700 – 1830**

Navy Caucus - **1700 – 1830**

WEDNESDAY, 17 MAY

Controls and Displays – **0830 – 1100**

Human Factors in Training - Part 1 – **0830 – 1100**

- Welcome & Session Overview - Melissa Walwanis Nelson, Danielle C. Merket
- A Method To Provide Cognitive Realism to Train Decision Making - Susan Archer
- A Methodology For Validating a Computer-Based Simulation on the Teaching of Critical Thinking Skills - David Holness, Joan Johnston, Ph.D., Amy Griffin, Sarah Aust, Kenneth E. Lane, Ph.D. & Lorraine Alba
- Landing Helicopters in the Classroom Training: Sailors on a Virtual Flight Deck - Thomas M. Franz, Psy.D. & John Ruffner, Ph.D.
- Aviators' Attitudes & the Five Deadly Mistakes - John Stewart, Ph.D.

Human Factors Engineering/Human Systems Integration: Management and Applications - **1230 – 1430**

- Optimizing Human Performance (OHP) Front End Analysis (FEA) (tm) - Janis E. Nagy, Senior Associate, Booz Allen Hamilton
- Identifying Human Performance Problems in a Submarine Environment Utilizing the Human Factors Analysis and Classification System (HFACS) Framework - Katie Shobe, Ph.D., LT, MSC, USN Human Performance Detachment, Submarine Learning Center
- Automation as a Tool for Enabling Decision Superiority - Uldi, Shvern, Engineer, Army Test and Evaluation Command, Alexandria, VA.
- Commercial Speech Technology in the Military Domain - David Williamson, Senior Crew Systems Engineer, Human Effectiveness Directorate's Collaborative Interfaces Branch at Wright-Patterson Air Force Base, Ohio.
- MANPRINT at Redstone Arsenal - Thomas C. Cook, Army Research Laboratory, Human Research and Engineering Directorate, Redstone Arsenal, Alabama.

User-Computer Interaction - **1230 - 1430**

- Warfighter-Machine Interface for FCS - Mica Endsley, SA Technologies (Marietta, GA) and Matt Hannen, Boeing (Mesa, AZ)
- The Role of Performance Prediction in UCI Design - Sue Archer, Micro Analysis & Design, Boulder, CO
- HSI Constraints on UCI Design - Jennifer Narkevicius, Ph.D, Skillsnet, Inc. (Alexandria, VA)
- Eye-tracking Analysis of Usability Evaluation Videos - Lt Col Terence Andre, Ph.D., Deputy Dept Head for Research, DFBL and Jenny Coker, Cadet First Class
- Usability Methods for Undergraduate Education and Research - Lt Col Terence Andre, Ph.D., Deputy Dept Head for Research, DFBL

Human Factors in Training - Part 2 – **1230 – 1430**

- Training Dilemmas for Real-Time Command & Control Decision Making - John K. Hawley, Ph.D.
- Identifying Interface Limitations for Virtual Environment Training Systems - Roy Stripling, Ph.D., James N. Templeman, Ph.D., Linda E. Sibert, Joseph T. Coyne, Robert G. Page, Zina La Budde, & Daniel Afergan
- Testing System Capabilities Through Manipulation of User Performance and Proficiency - Dennis Vincenzi, Ph.D.
- Session Wrap Up

Human Factors in Extreme Environments –**1500 - 1700**

Sustained/Continuous Operations –**1500 - 1700**

- Opening Comments - Matthew Yanagi, SPAWAR (SSC) & Naval Health Research Center San Diego, CA
- Eye-Com® Oculometric, EEG and Cognitive-Performance Monitoring of Sleep-Deprived Subjects in a Drive/Flight Simulator Outfitted with Tele-Communications Transmission,

Recording and Alerting Technology - William Torch, MD, Eye-Com Corp & Washoe Sleep Disorders Center Reno, NV

- Real-time Quantification of EEG Indices of Drowsiness: Methods for early identification of individuals most susceptible to sleep deprivation - Chris Berka, Daniel J. Levendowski, Philip Westbrook, Gene Davis, Michelle N. Lumicao, Vladimir T. Zivkovic, Richard Olmstead* Ambulatory Brain Monitoring, Inc. San Diego, CA *Veterans Affairs Greater Los Angeles Healthcare System Los Angeles, CA
- Computer-based Performance Assessment to Enhance Decision Superiority - Robert E. Schlegel, Ph.D. & Kirby Gilliland, Ph.D. Center for the Study of Human Operator Performance (C-SHOP)
- University of Oklahoma Norman, OK
- "Short Sleepers" and "Long Sleepers": Individual Difference in Performance After Sleep Deprivation - Marcus Taylor, Ph.D., Naval Health Research Center San Diego, CA
- Summary, questions, discussion, SubTAG business

Acting Co-Chair: Matthew Yanagi, SSC & NHRC, P.O. Box 250 San Diego, CA 92186
yanagi@nhrc.navy.mil (619) 767-4969

Mission Performance Measurement Interest Group –**1700 - 1800**

Social – **1915 – 2100**

THURSDAY, 18 MAY

Operating Board – **0830 – 1000**

Tour – **1100-1600**

- 1100 - Depart Aladdin for Nellis AFB
- 1145 - Arrive Nellis AFB. Met at Craig Road Gate Visitor Center by Mr. James S. Davis.
- 1200 - Arrive HQ USAF Warfare Center, Travel to Main Briefing Room
 - HQ USAF Warfare Center Brief
 - AFRL/HE Activities at USAF Warfare Center Brief & discussions
- 1400 - Travel to USAF Thunderbirds Aerial Demonstration Team Hanger. Video and tour.
 - Travel to Threat Training Facility. Outside tour of "petting zoo"
- 1500 - Depart Nellis AFB

EXECUTIVE COMMITTEE

Chair (Navy)	Ms. Maureen Bergondy-Wilhelm	(407) 380-4777 DSN 960 maureen.bergondy@navy.mil
Vice Chair (Air Force)	Mr. Adrian Salinas	(210) 536-4428 adrian.salinas@brooks.af.mil
Immediate Past Chair (Army)	Ms. Dawn Woods	(508) 233-5069 DSN 256 dawn.woods@natick.army.mil
Army Representative	Mr. Benjamin Gibson	(210) 221-1622/DSN 471 ben.gibson@amedd.army.mil
Navy Representative	LCDR Joseph Cohn	(202) 404-8624 cohn@itd.nrl.navy.mil
Air Force Representative	Dr. Robert Nullmeyer	(480) 988-6561x283 DSN 474 robert.nullmeyer@mesa.afmc.af.mil
NASA Representative	Ms. Faith Chandler	(202) 358-0411 fchandle@hq.nasa.gov
FAA Representative	Dr. Thomas McCloy	(202) 267-7167 tom.mccloy@faa.gov
TAG Coordinator	Ms. Sheryl Cosing	(703) 925-9791 scosing@comcast.net

SUBTAG CHAIRS

Controls and Displays	Mr. Adrian Salinas	(210) 536-4428 DSN 240 Adrian.salinas@brooks.af.mil
	Ms. Marianne Paulsen	(850) 235-5527 Marianne.paulsen@navy.mil
Design: Tools and Techniques	Dr. Pamela Savage-Knepshield	(732) 427-3854 DSN 987 psavageknepshield@arl.army.mil
	Mr. Joseph Barretta	(410) 278-4172 Joseph.barretta@atc.army.mil
Human Factors Engineering / Human Systems Integration: Management and Applications	Ms. Katrina Baker	(410) 278-3472 Katrina.baker@atc.army.mil
	Mr. Corey Cook	(850) 234-4829 Corey.cook@navy.mil
Human Factors in Extreme Environments	Mr. Charles Weaver	(850) 234-4152 Charles.Weaver1@navy.mil
Human Factors in Training	Ms. Melissa Walwanis-Nelson	(407) 380-4749 DSN 960 Melissa.walwanis@navy.mil
	Ms. Danielle Merket	(407) 380-4792 DSN 960 Danielle.merket@navy.mil

Human Factors Standardization	Mr. David Britton	(937) 255-2030 DSN 785 david.britton@wpafb.af.mil
Human Factors Test and Evaluation	Mr. Darren Cole Mr. John Rice	(661) 275-0171 darren.cole@edwards.af.mil (757) 282-5546 x3802 ricej@cotf.navy.mil
Human Modeling and Simulation	LT Jeff Grubb	(301) 342-9284 Jeff.grubb@navy.mil
Personnel Selection and Classification	LT Tatana Olson Dr. Raymond King	(850) 452-2257 ext 1090 tmolson@nomi.navy.mil (405) 408-5216 Skyking321@aol.com
Sustained/Continuous Operations	Dr. Thomas Nesthus LCDR Walter Carr	(405) 954-6297 tom.nesthus@faa.gov (301) 435-5144 carrw@nidcd.nih.gov
System Safety/Health Hazards/Survivability	Mr. George Murnyak Dr. Michael Fineberg	(410) 436-2925 DSN 584 George.mrnyak@amedd.army.mil (703) 676-0060 finebergm@saic.com
Technical Society/Industry	Mr. William Lytle	(303) 971-8972 william.b.lytle@lmco.com
User-Computer Interaction	LT Nausheen Momen Mr. Stephen Merriman	(850) 452-3668 pnmomen@kent.edu (972) 994-6419 Stephen.c.merriman@boeing.com
Workload and Stress	Ms. Debra Patton	(410) 278-5890 DSN 298 dpatton@arl.army.mil
Mission Centric Human Performance Measurement Interest Group	Mr. John Rice	(757) 282-5546 x3802 ricej@cotf.navy.mil

ABSTRACTS

If you are presenting at the plenary session, please bring your half page summary for inclusion in the Minutes or send it to the TAG Coordinator in advance. If you are presenting in a subTAG session, please send your summary to the subTAG chair of the session in which you are presenting.

GENERAL GUIDELINES

Font: 11 or 12 point type, Arial (san serif) font. Margins: 1.0 inch left, right, top and bottom.

Submission: Electronic format is preferred: PC-readable disk or e-mail in Word format. If that is not possible, submit hardcopy that meets all the format requirements.

Do not include classified, acquisition sensitive, or proprietary information.

You may wish to have your sponsor's approval before briefing at the TAG. The summaries will be included in Minutes published on the TAG website.

SESSION ABSTRACTS FORMAT

TITLE: Full presentation title.

PRESENTER: Name, title, organization, complete mailing address, phone number, DSN (if applicable), email (optional). Separate with commas on two or three lines to leave as much space for narrative as possible.

SYNOPSIS: Narrative. Briefing slides will not be published. Address all important points of your presentation in a succinct manner. Abstracts should be no longer than one-half page (4.25 inches in height or 25 lines maximum). Note general format above.

For presentations discussing results of research and applications:

Concentrate on completed research or interim results which have not been previously reported at the TAG. Include a general statement to orient the reader to the problem under study, the findings, and the recommendations.

For presentations discussing programs in progress:

Acquaint others with on-going work, so we may know what others are doing. Mention participating individuals, phone numbers, organizations, and the portion of work each is addressing so they may be contacted for more information. Mention joint-service participation and dual-use technologies. If the program is producing a product, mention what it will do; and identify the intended user community.

General Information

ATTENDANCE POLICIES

Attendance at the **DoD HFE TAG** is open to:

- US Military/Government employees
- Official technical society/industrial association representatives
- Employees of National Laboratories or Federally contracted research centers
- Specifically invited plenary presenters/guests
- Students majoring in human factors and related disciplines

All others must have a written invitation to attend. Contact the TAG Coordinator for additional information.

ACCOMMODATIONS

A block of rooms has been reserved for the TAG at the Aladdin Resort:

~~Cutoff date: 14 April 2006~~ **EXTENDED to 21 APRIL 2006**
~~TAG rates: single \$99~~ Block full - no rooms available

The above rates are exclusive of tax. The current taxes are 9% room/night.

Check-in: 1500 hours Check out: 1100 hours

Reservations: 1(877) 333-WISH. You must use our group code AUSDEPT.

DO NOT MAKE YOUR RESERVATIONS ONLINE AS YOUR RESERVATION WILL NOT BE ASSOCIATED WITH OUR GROUP.

No BOQ arrangements in the Baltimore metropolitan area have been made for the TAG.

TRANSPORTATION

For maps of the Las Vegas area, go to <http://www.lvcva.com/vegas-maps.jsp>. Please note that McCarran Airport is extremely busy - wait times are long for airline check-in and security screening. Plan on arriving at the airport 2 hours before your departure time. For personalized transportation needs, go to McCarran Airport's website: <http://www.mccarran.com/>. Select Ground Transportation.

REGISTRATION

Registration can be done online at the TAG web site: <http://hfetag.dtic.mil/register.html> or by submitting the registration form in this packet.

Please remember that you must be register and be badged before attending any SubTAG/Plenary session.

Registration Desk is open	Monday	1100 – 1430
	Tuesday	0800 – 1430
	Wednesday	0800 – 0830
	Thursday	0800 – 0830

PAYMENT

Credit card: *The TAG accepts payment for registration by credit card using PayPal only. The online registration form must be used in order to accept a credit card payment. CREDIT CARDS ARE NOT ACCEPTED ON-SITE.*

Checks or money orders: Are accepted. Purchase orders are not accepted. Please do not mail cash. Enclose payment with the registration form, or send separately if registering online.

No registrations will be accepted after 28 April 2006. If you are unsure whether you will be able to attend the meeting and this deadline presents a problem, call the TAG Coordinator.

Fees:

Regular registration	\$100.00
Special student fee (applies to full-time students)	\$ 5.00
Social - per person (optional)	\$50.00

FUNCTIONS

Social: On Wednesday, May 17 2006, join us for an evening of entertainment at the Variety Theater in the Aladdin. Unique specialty performers from around the world come together in "V", the fast-paced showcase of record breaking, jaw dropping, uproarious, turn-of-the-tables performances and comedy where the specialty acts rule the show! Every show includes magic, special effects, death-defying stunts, wild comedy, visual artists, physical insanity and much more! It's variety, it's Vegas, it's V the Ultimate Variety Show, with something for everyone!

Tour: On Thursday, we will depart the hotel at 1100 for a tour at Nellis Air Force Base. We will return to the hotel by 1600. Nellis Air Force Base is home of the Predator and the Combined Air and Space Operations Center - Nellis (CAOC-N). Program officials will brief on both programs in the Threat Training Facility. We'll then have an opportunity to visit the "petting zoo" and look at tanks, missiles, and other large hardware.

MISCELLANEOUS

Travel Orders: All technical meetings will be held at the conference hotel. For networking purposes and for meeting changes/updates, it is desirable that you stay at the conference hotel.

Clearances: All briefings are unclassified: no clearances are necessary for U.S. citizens for any of the scheduled meetings.

Messages: Non-emergency messages will be kept at the TAG registration desk. Emergency messages will be delivered during the meeting. For incoming calls, use (702) 785-9500, referencing the TAG.

Military Dress: Check with your Service Representative.

Abstracts: Presenters at any of the sessions should provide a summary of their presentation to their subtag chair prior to the meeting for inclusion in the Minutes of the meeting. An electronic version is preferred. For format and detailed instructions, refer to the Abstracts section of this packet.

New Members: If you are new to the TAG, you should plan to attend the new member orientation session on Monday, 15 May 2006 from 1000-1100 hours. New attendees are also encouraged to participate in their specific caucus meetings.

Caucus Meetings: If you work for one of the military services (uniform or civilian), you should plan to attend your service caucus meeting. These meetings are intended to provide you with the opportunity to participate in TAG decisions and discussions concerning service-specific issues.

Materials Storage: The Aladdin will accept small packages for storage at no cost. Label the items:

ATTN: DoD HFE TAG/S. COSING
Aladdin Resort and Casino
3667 Las Vegas, Bld. South
Las Vegas, NV 89109

**DEPARTMENT OF DEFENSE
HUMAN FACTORS ENGINEERING
TECHNICAL ADVISORY GROUP (TAG)
Meeting 55: 15 -18 May 2006**

REGISTRATION

Use this form or register online: <http://hfetag.dtic.mil/register.html>

1. Mailing Information (including military rank or title, ie., Dr., Ms., Mr.):

Name _____
Address _____

City/State/Zip _____
Telephone _____ DSN _____ FAX _____
Email _____

2. Badge Information:

Name _____
Organization _____

3. Status (See "Attendance Policies" for information)

() military/government () GOCO () other _____
() official (credentialed) TS/I member representing _____

4. If called the week prior to the TAG, do you have a 15-30 minute briefing you could present?

() plenary session or _____ SubTAG session

5. V - The Ultimate Variety Show on Wednesday, 17 May (guests are welcome). The cost is \$50:

___yes ___no _____ # of total attendees (including yourself)

6. Tour on Thursday, 18 May of Nellis Air Force Base (no cost):

___yes ___no _____ # of total attendees (including yourself)

7. Enclose check/money order made out to the **DoD HFE TAG**. Credit card payment must be made via the TAG's online registration form <http://hfetag.dtic.mil/meetschl.html>:

Regular registration	\$100.00	_____
Student registration	\$ 5.00	_____
V- The Ultimate Variety Show	\$50.00	_____

TOTAL _____

Return this form and payment by 4/28/06 to:

Sheryl Cosing
10822 Crippen Vale Ct.
Reston, VA 20194
Phone (703) 925-9791 FAX (703) 925-9694
scosing@comcast.net
TAG Web Site <http://hfetag.dtic.mil>